

IN THE CLAIMS

1 - 50. (canceled)

51. (currently amended) A dry reagent lateral flow strip assay device for detecting at least one analyte in a test sample within a pre-determined range of analyte concentration using a porous member capable of being traversed by the sample comprising:

a) a sample application zone on the porous member having diffusively immobilized therewith a labeled indicator reagent, which does not bind to the analyte;

b) at least one test zone having non-diffusively bound thereto a pre-determined amount of a first reagent, based on the pre-determined range of analyte concentration, that binds to both the labeled indicator reagent and to the analyte ~~forms a first reaction product when contacted with a mixture of the sample and the labeled indicator reagent~~ to produce a corresponding detectable response in the test zone, the pre-determined amount of the first reagent such that the detectable response ~~being~~ is inversely proportional to the analyte concentration;

c) at least one reference zone having non-diffusively bound thereto a pre-determined amount of a second reagent, based on the pre-determined range of analyte concentration, that binds to the labeled indicator reagent ~~forms a second reaction product when contacted with the mixture of the sample and the labeled indicator reagent~~ to produce corresponding detectable response in the reference zone, the pre-determined amount of the second reagent such that the detectable response ~~being~~ is directly proportional to the analyte concentration;

wherein the sample application zone, the test zone and the reference zone are in fluid communication with one another through the porous member; and

wherein the detectable response in the test zone plus the detectable response in the reference zone equal a total detectable response that is substantially constant for the pre-determined range of analyte concentration.

52. (currently amended) The assay device of claim ~~52~~51, wherein the porous member further comprises a bibulous solid phase material.

53. (previously presented) The assay device of claim 52, wherein the porous member further comprises fiberglass, cellulose or nylon.

54. (previously presented) The assay device of claim 51 for detecting multiple analytes in a test sample, further comprising more than one test zone, each corresponding to an analyte.

55. (previously presented) The assay device of claim 51, wherein the porous member further comprises more than one bibulous material, wherein the sample application zone, the test zone and the reference zone are in fluid communication therethrough.

56. (previously presented) The assay device of claim 51, further comprising one or more reagents bound to the porous member, the reagents being selected from the group consisting of: antibodies, antigens, enzymes, substrates, small molecules, proteins, viral lysate, bacterial lysate, receptors, sugars, carbohydrates, polymers and detergents.

57. (previously presented) The assay device of claim 51, further comprising a sample filtration member in contact with the porous member.

58. (previously presented) The assay device of claim 51, wherein the labeled indicator reagent is a particle-linked antigen or a particle linked antibody.

59. (previously presented) The assay device of claim 51, wherein the first reagent is an antibody or an antigen.

60. (previously presented) The assay device of claim 51, wherein the second reagent is an antibody that binds to the labeled indicator reagent to form the second reaction product.

61. - 67. (canceled)

68. (new) A dry reagent lateral flow strip assay device for detecting at least one analyte in a test sample within a pre-determined range of analyte concentration using a porous member capable of being traversed by the sample comprising:

a) a sample application zone on the porous member having diffusively immobilized therewith a labeled indicator reagent, which binds to the analyte to form a conjugate;

b) at least one test zone having non-diffusively bound thereto a pre-determined amount of a first reagent, based on the pre-determined range of analyte concentration, that binds to free labeled indicator reagent and does not bind to the conjugate to produce a corresponding detectable response in the test zone, the pre-determined amount of the first reagent such that the detectable response is inversely proportional to the analyte concentration;

c) at least one reference zone having non-diffusively bound thereto a pre-determined amount of a second reagent, based on the pre-determined range of analyte concentration, that binds to the conjugate and not to free labeled indicator reagent to produce corresponding detectable response in the reference zone, the pre-determined amount

of the second reagent such that the detectable response is directly proportional to the analyte concentration;

wherein the sample application zone, the test zone and the reference zone are in fluid communication with one another through the porous member; and

wherein the detectable response in the test zone plus the detectable response in the reference zone equal a total detectable response that is substantially constant for the pre-determined range of analyte concentration.

69. (new) The assay device of claim 68, wherein the porous member further comprises a bibulous solid phase material.

70. (new) The assay device of claim 69, wherein the porous member further comprises fiberglass, cellulose or nylon.

71. (new) The assay device of claim 68 for detecting multiple analytes in a test sample, further comprising more than one test zone, each corresponding to an analyte.

72. (new) The assay device of claim 68, wherein the porous member further comprises more than one bibulous material, wherein the sample application zone, the test zone and the reference zone are in fluid communication therethrough.

73. (new) The assay device of claim 68, further comprising one or more reagents bound to the porous member, the reagents being selected from the group consisting of: antibodies, antigens, enzymes, substrates, small molecules, proteins, viral lysate, bacterial lysate, receptors, sugars, carbohydrates, polymers and detergents.

74. (new) The assay device of claim 68, further comprising a sample filtration member in contact with the porous member.

75. (new) The assay device of claim 68, wherein the labeled indicator reagent is a particle-linked antigen or a particle linked antibody.

76. (new) The assay device of claim 68, wherein the first reagent is an antibody or an antigen.